
KY 90 Intermediate Planning Study

Reconstruct from the Louie B. Nunn (Cumberland) Parkway at Glasgow to the Barren-Metcalf County Line

Executive Summary

The proposed KY 90 widening project begins on the southwest side of the city of Glasgow at the Louie B. Nunn (Cumberland) Parkway and continues southwest to the Barren-Metcalf County Line. The U.S. Geological Survey (USGS) location is Kentucky: Barren County, Glasgow South-Temple Hill- Summer Shade Quadrangles. The proposed project has a total length of approximately 10.9 miles.

In the year 2000, the average daily traffic counts were 9,410 vehicles per day (vpd) from the Louie B. Nunn (Cumberland) Parkway to KY 2198, 6,780 vpd from KY 2198 to KY 1330, 5,560 vpd from KY 1330 to KY 839, and 4,630 vpd from KY 839 to the Barren-Metcalf County Line. In the year 2025, traffic is projected to increase 60-65%, yielding 15,530 vpd from the Louie B. Nunn (Cumberland) Parkway to KY 2198, 11,190 vpd from KY 2198 to KY 1330, 9,170 vpd from KY 1330 to KY 839, and 7,660 vpd from KY 839 to the Barren-Metcalf County Line.

Goals established for the project are as follows:

- ❑ Completion of spot geometric improvements that were started in previous projects to correct remaining geometric deficiencies.
- ❑ Provide increased safety along the corridor by increasing sight distances.
- ❑ Provide passing lanes for safer, more frequent passing opportunities.
- ❑ Address capacity problems at the Louie B. Nunn (Cumberland) Parkway interchange.
- ❑ Serve as an improved connection for people in the region that are seeking access to the employment, educational, and health care opportunities in Glasgow.
- ❑ Serve as a connection to major regional recreational opportunities at Dale Hollow Lake and Lake Cumberland for recreational vehicle and boat trailer traffic.
- ❑ Improve systems connectivity by providing a more reliable high-quality highway for commercial vehicle access to south central Kentucky.

Major issues and concerns for the project are as follows:

- ❑ Sinkholes, evidence of karst geology, and records of Gray Bats indicate the existence of caves in and around the project area.
- ❑ The Refuge Church of Christ Cemetery is located in the project area.
- ❑ There are several underground storage tank and hazardous material sites located in close proximity to the existing KY 90 roadway.

A two-lane roadway does not appear to be sufficient for the anticipated traffic volumes from the Louie B. Nunn (Cumberland) Parkway interchange to KY 2198; therefore, four-lanes are recommended. Because there is considerable residential and commercial development along the existing highway and significantly more right-of-way will be needed in this segment, a new alignment may have fewer property impacts. A five-lane urban cross-section (four through lanes with curb-and-gutter and a continuous center left turn-lane) will be needed in the immediate interchange area. Beyond KY 2198, two lanes are sufficient for the projected traffic volumes, although passing and turn-lanes may be occasionally needed.

A review of the project phases and costs identified in the *Kentucky Transportation Cabinet (KYTC) "Approved 2000-2002 Biennial Highway Construction Program and Identified Preconstruction Program Plan for FY 2003 Through 2006"* (generally referred to as the *Six Year Highway Plan*) and *KYTC 1999 Statewide Transportation Plan* was conducted. Based on improvements recommended as a result of this study, a revised cost estimate was prepared using average costs for similar projects in Kentucky. Project phase costs were reevaluated and are listed in Table ES-1.

Priority 1 includes reconstruction from the Louie B. Nunn (Cumberland) Parkway to KY 2198 and selected spot improvements. Priority 2 includes reconstruction from KY 2198 to the Barren-Metcalf County Line and remaining improvements.

Table ES-1. Project Phase Costs: KY 90, Reconstruct from the Louie B. Nunn (Cumberland) Parkway to the Metcalfe County Line, Barren County

Phase	Current Project Estimate ¹	Recommended Project Estimate ³	
		Priority 1	Priority 2
Planning/Design	1,500,000 ²	Authorized	\$2,000,000
Right of Way	\$3,200,000	\$3,200,000	\$5,500,000
Utilities	\$2,500,000	\$2,500,000	\$4,000,000
Construction	\$16,000,000	\$16,000,000	\$17,300,000
Total	\$23,200,000	\$21,700,000	\$28,800,000

1. From the *Kentucky Transportation Cabinet (KYTC) "Approved 2000-2002 Biennial Highway Construction Program and Identified Preconstruction Program Plan for FY 2003 Through 2006"* (*Six Year Highway Plan*) and the *KYTC 1999 Statewide Transportation Plan*
2. Authorized on August 15, 2000
3. Class D Estimate